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SCOMBRID FISHES IN ST. ANDREW
BAY, FLORIDA

Eugene L. Nakamura

Except for the Spanish mackerel (*Scomberomorus maculatus*), fishes of the family Scombridae seldom occur in bays and estuaries of the Gulf of Mexico. The occurrence of six species of scombrids in a bay is unusual and worthy of note.

The six species (*Auxis thazard*, *Euthyn-*

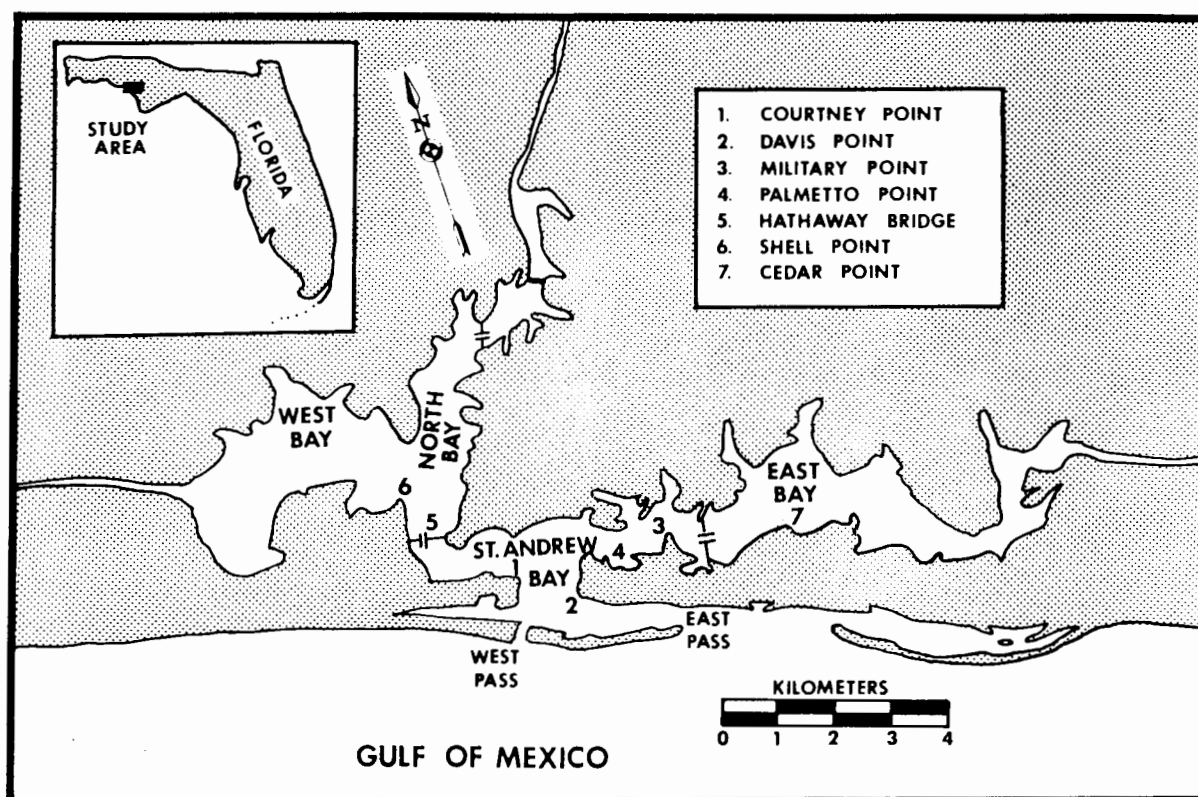


Figure 1. Locations of scombrid catches in St. Andrew Bay, Florida.

nus alletteratus, *Sarda sarda*, *Scomber japonicus*, *Scomberomorus cavalla*, and *Scomberomorus maculatus*) were caught in St. Andrew Bay, Florida (Fig. 1), which is located on the northeastern border of the Gulf of Mexico. This bay differs from other bays in the gulf, because its water is relatively high in salinity and relatively low in turbidity (Brusher and Ogren, 1976). These features make the bay water similar to the gulf water and most probably permit the occurrence of these scombrids in this bay.

A comparable occurrence of scombrids has been reported in the Chesapeake Bay on the U.S. Atlantic coast. Five species (*E. alletteratus*, *Sarda sarda*, *Scomber scombrus*, *Scomberomorus cavalla*, and *Scomberomorus maculatus*) have been found in this bay (summary and references in McHugh, 1967). The Chesapeake Bay (1,140 thousand hectares) is over 100 times larger than St. Andrew Bay (11 thousand hectares).

Accounts of the six species from St. Andrew Bay follow. All specimens preserved in collections at this or other laboratories were obtained by members of the Panama City Laboratory (PCL), National Marine Fisheries Service.

Frigate mackerel—
Auxis thazard (Lacépède)

A single adult frigate mackerel (FL = 43.3 cm) was caught in a gill net near Courtney Point on 19 September 1972. The specimen, which has been eviscerated, is in the PCL collection. The presence of this species in the Atlantic was authenticated by Richards and Randall (1967). It is seldom caught in the northern Gulf of Mexico.

Little tunny—*Euthynnus alletteratus*
(Rafinesque)

In September-December 1972 and October-December 1973 (May, Trent, and

Pristas, 1976), 281 juvenile and adult little tunny (FL = 19.0-69.0 cm) were caught with gill nets near Courtney Point. Two specimens (FL = 19.0 and 20.3 cm) are in the PCL collection. This species is commonly caught by anglers during the summer and fall in the bay by trolling.

Atlantic bonito—
Sarda sarda (Bloch)

A single juvenile specimen (FL = 22.4 cm) was caught by trolling between Courtney Point and Davis Point on 1 April 1975. It is in the PCL collection. This species, like the frigate mackerel, is seldom caught in the northern Gulf of Mexico.

Chub mackerel—*Scomber japonicus*
(Houttuyn)

A single juvenile specimen (FL = 7.6 cm) was caught in a trawl off Courtney Point on 2 April 1973. It is in the PCL collection. Chub mackerel have been seen frequently in schools of mixed bait fishes composed of *Decapturus punctatus*, *Sardinella anchovia*, and others in the nearshore waters of the gulf (Hastings, Ogren, and Mabry, 1976).

King mackerel—
Scomberomorus cavalla (Cuvier)

Two juveniles (FL = 59.8 and 110.0 mm) were caught in a trawl between Military Point and Palmetto Point on 4 October 1972. The specimens are in the U.S. National Museum (Cat. No. 213543). King mackerel weighing from 1 to 2 kg are commonly caught by anglers while trolling in St. Andrew Bay during summer and fall.

Spanish mackerel—
Scomberomorus maculatus (Mitchill)

Three small juveniles (FL = 26.5, 26.7, and 26.8 mm) were dip-netted around a night light at 2130 h off Davis Point on 26 August 1970. These specimens are in the

collection of the Miami Laboratory of the National Marine Fisheries Service.

Larger Spanish mackerel have been caught in the bay by several methods of fishing. Experimental gill netting (May et al., 1976) off Courtney Point in September-November 1972 and in March-December 1973 has yielded 497 specimens (FL = 28.5-61.0 cm). Experimental trawling at night in the bay has yielded the following: three specimens (FL = 25.5-31.5 cm) in September 1972 off Courtney Point; one (FL = 29.0 cm) in October 1972 off Shell Point; one (FL = 29.0 cm) in April 1973 off Cedar Point; and two (FL = 23.5 and 27.0 cm) in August 1973 in East Pass. No specimens were kept. Sport fishermen catch this species by angling from boats and from shore, while commercial fishermen catch them in gill nets in East Pass. Spanish mackerel are most abundant in St. Andrew Bay during spring and fall.

Verifications of identifications were made as follows: *Auxis thazard* by L. R. Rivas; the two juvenile *Scomberomorus cavalla* by B. B. Collette; and the three small juvenile *Scomberomorus maculatus* by W. J. Richards.

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ADDRESS: National Marine Fisheries Service, Gulf Coastal Fisheries Center, Panama City Laboratory, Panama City, Florida 32401.